DIFFERENT PERSONS AS THEY RIDE IN DIFFERENT CARS - - - - - BY TAD

LUBRICATING OILS SHOULD BE TESTED! METHODS ARE DESCRIBED

Motor Age Says Heat, Emulsion or Road Methods May Be Employed; Motorists Should Always Use High Grade Oil Best Adapted to Particular Car; Good Grades Will Vary.

THERE are a great many motorists and garagemen who are interested in knowing how to make tests of the lubricating oils to determine the actual value of these for the exacting work required of them within the internal combustion engine. Various factors have to be considered in determining whether one grade or brand of lubricant is better than another for the purpose, and while really simple tests are out of the question, there are some things that can be done with very little trouble which will stamp an oil as good or bad, says Motor Age.

Depending on whether or not an oil properly fulfills the functions for which it is put into the engine, the latter either will run efficiently or will be reduced to such a condition that it soon must be repaired. The lubricant affects the gasoline consumption, and, in short, a large proportion of present day engine troubles are directly traceable to the use of the wrong kind or grade of oil.

Therefore, it behooves every car owner and every man who sells cars, or repairs them, to make sure that he is supplying or using the best oil he can obtain. He either must have utter confidence in the brand he uses, or he must make sure of unknown brands by performing tests that will serve to indicate how good they are.

Heat Test.

The reaction known as the heat test is very simple to make with any lubricating oil. Simple though it is, perhaps there is no other test which indicates so decisively and so quickly the purity and degree of refining an oil, as well as its durability, when such an oil is subjected to the extreme high temperature met with in internal combustion engines.

The heat test consists of heating a sample of oil to a temperature of between 300 and 500 degrees Fahrenheit—depending upon the finish point—holding same at this temperature for a period ranging from 10 to 15 minutes. Two distinctive results are obtained:

1. A good durable oil shows a slight darkening from its original color, the change in color being only to a darker shade, the oil still remaining clear and without sediment.

2. A poorly refined and impure oil shows an immediate alteration in color, quickly changing to a dense black. As the heat is maintained, a black precipitate settles out. The quantity of the precipitation depends upon the impurity of the oil.

Just as different samples of oil, good or bad, retain their color or blacken during the heat test, just so will be their reaction when exposed to an even higher temperature in an explosion motor, and it is reasonable to conclude that a continuous precipitation of black sediment in impure oil will rapidly destroy its lubricating properties, and within a short time be the cause of costly wear of all parts in moving contact.

Emulsion Test.

The emulsion test shows the quality of lubricating oils about as accurately as does the heat test on straight or blended hydro-carbon oils only. Wherever animal or vegetable oils are present, this test ceases to be reliable.

The emulsion test consists of vigorously shaking a sample of oil with about an equal volume of water in, say, a four-ounce bottle and allowing same to stand for 24 hours after shaking.

The results are:

1. A good durable oil shows a very slight line of demarcation where the oil meets the water below it. The water upon which the oil floats may be nearly clear or slightly cloudy in appearance, thus showing the absence of acid compounds.

2. A poorly refined oil will be seen to have emulsified or permanently mixed with the water, and to have formed a semi-fluid, reddish-white or brownish-white mass, containing a slight layer or globules of oil. This curdled mass extends nearly to the bottom of the bottle and floats upon the remainder of the water, which is milky white. Emulsification shows the presence of acid products.

Practical Road Tests.

Let all oil be drained from the motor to be tested, and the brand to be tested put in, the exact weight in pounds of oil put in being fully recorded. The amount of gasoline should also be ascertained and a reading of the speedometer taken.

Then let a test be run over an average road, including steep hills, straight, level stretches, etc., for a distance of some 50, or even 500 miles if desired. At the end of the run all oil should be drained from the motor and weighed, the amount of gasoline used determined, as well as the exact total distance covered. The number of miles per gallon of gasoline and oil can then be found by dividing the total mileage by the quantity of fuel or oil in gallons.

In order to determine the relative value of another kind or grade of oil in the same engine a similar test should be run for the same distance and under the weather conditions over the same roads. This sort of testing can be done while you are driving your car right along, and whichever oil proves most advantageous after thorough trial of the several brands is by all means the one you should use constantly.

Maxwell Assembling Plant May Come To El Paso This Fall

A report has been current here all week that the Maxwell Motor corporation will erect an assembling plant in El Paso by fall, to take care of the rapidly growing business in this section.

The report has it that when G. E. Sherman, of the Maxwell staff, was here recently, he looked over several sites and reported to the factory. The local agents, the Buquor Motor company, state that they have no advices on the matter and a wire to Mr. Sherman has brought no reply.

OLDSMOBILE PLANS OUTPUT OF 20,000

The production of Oldsmobiles, already well beyond the 10,000 mark per annum, is to be raised to 20,000 cars next season. This decision was arrived at by factory officials, after a careful canvass of the demand for the Olds product and a thorough analysis of business conditions throughout the United States.

The Olds Motor works has been a quantity producer of automobiles comparatively a short time. For the major portion of its career it manufactured only the most expensive cars, and in limited numbers. In 1915, however, it began to produce a light car, the success of which was instantaneous. Since then it has developed two improved models, a "four" and an "eight," with rapidly increased production.

TRAFFIC COPS, AS VIEWED BY MOTORISTS

By Richard H. Lee, in May Motor.

HAVE you ever driven through towns of the smaller size where the automobiles owned there are driven wild, where they come tearing from driveways and side streets in a manner that causes your hair to stand on end? Of course, you have. And then when you got to the next big city, and the cars were driven in orderly style along the right side of street, and where arms were extended to signal breaks in the procession, didn't the big traffic cop at the corner look good to you? You just bet he did.

Do you remember that afternoon you were anxious to get back to the office, you caught on the tail of the procession going east to west at the intersection just as the traffic cop blew for traffic to move north and south? And the bull came over and wanted to know what you meant by going against his orders, and did you want to ride down to see the lieutenant? And you called him a big bonehead and asked him how you could smell when he was going to signal after you got started, and you'd report him and get his buttons taken away from him?

Motor has asked me to expound the view of the policeman from the driver's seat. This invitation has been extended to me as chairman of the legislative committee of the American Automobile association. Writing from that angle I might tell how the blue-coat on the corner is the representative of law and order, how one should win his friendship and esteem and help him to help all the motorists, etc. I say I might write from that lofty angle. And then some carping, low brow critic would want to know if I ever drove a car and if I ever saw a traffic cop, and whether we had the kind in my town that they have in Mr. Critic's town.

Motorist's Views.

Be that as it may (as George Monroe used to say), after giving due thought to the subject assigned me, I have come to the conclusion that the view of the cop by the motorist depends on several things. Among these are:

1. The condition of the motorist's digestive apparatus.

2. Whether his engine is hitting on all 12 or whether he has to juggle his gears every time he wants to change pace a bit.

3. The driving peculiarities of the woman in the electric just ahead.

4. Objectively—whether some careless driver has run over the copper's toes a few minutes before.

With all of these conditions affecting one's mental vision, the task is rather complicated.

As a general proposition the relationship between traffic officer and motorist generally is growing more friendly. They no longer look at each other as deadly enemies for all time. Each is learning the human side and the limitations of the other, with a better understanding of each other's problems. The motorist appreciates that in many instances the traffic cop is his good friend; that the officer is fighting on the side of the greatest good for the greatest number.

Conditions in Cleveland.

In writing this I realize conditions everywhere are not so satisfactory as in Cleveland. It is generally known throughout the country that Cleveland has been fortunate in its police force. While it is not large, the men generally are above the average. And the standard of the traffic squad has been raised particularly high. Once upon a time duty on fixed traffic post was a punishment for the patrolman assigned to that duty. Conditions have changed, and now a permanent, trained, experienced squad is chosen for this difficult work, and there is a waiting list among the policemen trying for traffic duty. Our mounted men are more than ornaments, and in controlling a range of territory wider than that possible to the man on foot duty, the horse squadron has earned the admiration of all familiar with its effective methods.

I am well aware there are exceptions to this rule. In some cities the men on traffic duty are "coppers" and nothing more. They are officious, belligerent and obstinate. I believe where that condition exists as a general rule, the motorists are partly to blame. They have not shown a proper appreciation of what a capable, friendly squad can do in the expediting of traffic.

Some Exceptions.

There are exceptions to the rule of general capability, cornermen who are continually in hot water. I have one man in mind who had an uptown corner. Ninety percent of the travel at that place moves east and west, and in the rush hours this bulk is practically all in one direction—either up or down. There is little traffic against the main current and an unappreciable minimum of turning. In spite of this comparatively easy situation, blockades were frequent. It didn't take long for motorists and the department heads to discover that the wrong man was on the job there, and to make a change that has eliminated the blockades.

Instead of continuous wrangling between drivers and the officer, as in the past there is now teamwork and co-operation with the man.

Driver in the Wrong.

A traffic officer reprimanded me one day when I knew I was in the wrong. Feeling rather peaceful just then I agreed with him, told him I'd do better next time and handed him a cigar "to give to the sergeant." We're good friends now, exchanging smiles every time I pass his corner, and my car is never held up at his post. In fact, the nights when I drive home with the feeling that I have forgotten something are the nights when he, busy with the traffic, fails to see my smile and return my salute. A friend of mine is sure he is the victim of personal spite by a certain patrolman. During the light dimming crusade which most of our cities passed through, this friend was stopped one night while he was carrying four in his roadster. The patrolman insisted on driving right to the precinct station without any delays, or taking the friends to a nearby cafe. The officer wouldn't use any judgment at all. Now it so happens that orders had been issued for the policemen to bring all supposed offenders directly to district headquarters and not to decide any lighting questions for themselves. This man was carrying out orders. If you are at all familiar with police matters, you'll know that in the big departments the best thing the men do is to carry out orders. That's what they know best of all, and the average policeman will carry out orders no matter what happens. I've said a good many nice things about our bluecoated friends in the course of this essay, but I must say once in a while they go a little far in this particular direction.

The chief fault I would lay at the door of policemen in all cities is being strong on carrying out orders while weak on initiative.

MECHANICAL KNOWLEDGE OF AUTO UNNECESSARY

The average car owner of today has so little trouble with his motor that many drivers never even investigate that part of the mechanism which lies under the hood.

"I'll wager," said John N. Willys, president of the Willys-Overland company, while discussing the subject at the Toledo factory several days ago, "that the majority of people who own and drive cars cannot give a clear explanation of the meaning of transmission, differential or any one of the 50 other semi-technical terms I might mention connected with the mechanical construction of an automobile.

"While this is true in the majority of cases it does not follow that car owners are unappreciative of the many improvements that have been made.

"In the early days of the industry a man had to be an expert mechanic before he would venture far in his car. Today not only the head of the family but his wife and children are as much at home at the wheel of a motor car as in a pullman."

ROOM TO CORRECT MORE AUTO EVILS

Nashville Paper Suggests That Insurance Should Come in for Some Consideration.

An El Paso motorist sends the following editorial, clipping from the Nashville, Tennessean. It may prove of much interest to the motorists of the southwest:

When the automobile became, so suddenly and so largely, a popular means of vehicle transportation, it was inevitable that there should grow up in connection with its operation a good many evils. Many of those evils have been eliminated, but a few of them persist and at least one or two will prove very difficult of eradication. Naturally enough, those most difficult ones to be rid of are the most dangerous ones.

It probably would have been well if no automobile had ever had a horn. The basic idea—that of warning people of the approach of the car—is, of course, good. But it was borrowed from the operation of railroad trains and conditions are not similar. The railroad train runs on a track where every person who gets in front of it is a trespasser. The automobile runs on roads and streets where every pedestrian has equal right of way with it, and where great number of pedestrians are constantly passing.

The automobile horn has, in effect, given the automobile supreme right of way. Very largely, the driver depends upon his horn to warn pedestrians and horse drawn vehicles out of the way, instead of controlling his own speed in such way as to avoid collisions. Very often, when for any reason the warning of the horn fails, when the pedestrian fails to get into the clear quickly enough, an accident occurs, perhaps, to the pedestrian, perhaps to the occupants of the car. For the average driver is anxious to avoid accidents and, in most cases, will take the risk of injury to himself rather than the certainty of injury to a pedestrian. The trouble is that he depends upon his horn until, too late, he realizes that the horn is a broken reed.

To many, the system of automobile insurance appears to be wrong end first. A man may not insure himself against the carelessness of others in the operation of automobiles, but he may insure himself against his own carelessness, so far as money loss goes. The owner of an automobile goes to an insurance agency and takes out a policy that indemnifies him against any judgment in damages that may be obtained against him for anything occurring in connection with the automobile. In some sort, that is a license to carelessness. Some restrictions are made in the policy. Some owners undoubtedly further restrict themselves. But there is no denying the fact that the possession of indemnifying policies renders many automobile owners less careful than they would be if they themselves had to bear the money responsibility of their carelessness.

Just how these evils are to be corrected is a problem. They are not, in fact, pure evils and many persons will hardly agree that they are evils at all. They have their good features, but they do somewhat increase the likelihood of accidents in the operation of automobiles.

Automobile owners themselves have brought about many reforms for the benefit of the public. They are invited to think upon these two things in the hope that a satisfactory solution of them may be found. It is not amiss, either, that insurance men give the matter some thought, to the end that a system of automobile insurance may be devised that, while it protects the owner as much as may be, does not tend to augment carelessness.

Russia is said to be the only warring nation whose people are actually growing more prosperous during the conflict.

GREAT QUANTITY OF PETROLEUM IS STILL STORED UNDERGROUND

Expert Geologist Reports on Tampico Field and Asserts 14,000,000,000 Barrels Remain in Proved Area Though Percentage of Gasoline Is Reported As Very Low.

NOTWITHSTANDING various proposals to make motor fuel out of water by the magic addition of cheap chemicals, the earnest search for crude oil has not abated one whit. Wherever there are indications of oil the prospector is busy and in fields where actual development has taken place many new wells are being put down. Experts say that the production of oil will certainly be increased. By how large an amount remains to be seen.

The most remarkable story of immense underground storage of oil comes from Tampico, Mexico—that in that territory, at the present estimate, there is enough crude oil to afford a daily supply of 1,000,000 barrels for a period of nearly forty years.

The following is from the Oil, Paint and Drug Reporter:

"It is claimed by American geologists who have visited the different oil-producing fields in the Tampico territory recently that it is now possible to make a reliable estimate of the underground oil contents of the several localities where production is now in progress. Several of the larger companies have had surveys of this kind made of their properties, and the figures which have been obtained as to the possible production of the Gulf coast region considered in the aggregate are so large as to almost challenge belief. Among the experts who have been employed in this work is I. C. White, state geologist of West Virginia, who spent some time going over the fields.

"All told, there are said to be approximately 14,000,000,000,000 barrels of oil in underground storage in the areas that have already been proved. In arriving at these figures the geologists consider the output of the different wells, the possible length of time they will continue production and the size of the proved fields. In view of the fact that the producing area of the Gulf coast region of Mexico is being constantly widened, it is entirely a matter of conjecture how much larger the available output may be than the estimates that are now given. Geologists say that it would not surprise them if the underground storage is several times 14,000,000,000 barrels.

"Even at the present estimate there is enough crude oil in this part of Mexico to afford a daily supply of 1,000,000 barrels for a period of nearly forty years. No oil region has ever been discovered in the world that begins to compare with the one here. The bringing in of wells of almost fabulous production is becoming such a common practice as to provoke little comment. It would seem almost impossible that 328,000 barrels of oil could find its way to the surface through a fourteen-inch holes in the ground during a period of twenty-four hours, but the well that was bored in the Cerro Azul field, near here, a few weeks ago, was shown to have that enormous output by actual measurement. It is by far the largest producing well ever brought in in the world. Great difficulty was experienced in capping the well.

"While the oil that is found in the different fields around Tampico is all of an asphaltic base and yields comparatively small quantities of gasoline, it is being refined and made to product gasoline and various by-products on a considerable scale. Besides the large refineries and topping plants that are in operation here and which use big quantities of native crude oil, large shipments of the crude product are being made to refineries in Texas. Experiments are being made constantly with the view of discovering a method of obtaining a larger percentage of gasoline from the Mexican oil and it is believed that it will not be long until more or less success is had along this line and that the problem of obtaining a practically unlimited supply of gasoline at cheap prices from this source will have been solved."

COACH MOTORCYCLE MEN.

Two motorcycle experts with Gen. Pershing's forces in Mexico recently completed an adventurous ride of 350 miles as far as Casas Grandes with an Indian motorcycle equipped with Goodyear "Bluestreak" tires. Both had lieutenant's commissions in order to instruct the soldiers riding the new motorcycles purchased for the army. A good deal of the riding was through desert sand, requiring great skill in handling the motorcycle. Thousands of mesquite bushes were encountered. These bushes have thorns over an inch long, and many times the tires were rushed through beds of these thorns, yet the Bluestreaks came through without a scratch.